

What is claimed is:

1. An oligonucleotide for cleavage, detection or amplification of the *mecA* gene, a gene element of methicillin-resistant *Staphylococcus aureus* (MRSA), or
5 RNA derived from said gene, which oligonucleotide is capable of binding specifically to said *mecA* gene or RNA derived therefrom, and comprises at least 10 contiguous bases of any of the sequences listed as SEQ. ID. Nos. 1 to 17, or an oligonucleotide complementary to said
10 oligonucleotide.
2. The oligonucleotide according to claim 1, wherein said oligonucleotide is an oligonucleotide primer for DNA elongation reaction.
3. The oligonucleotide according to claim 1,
15 wherein said oligonucleotide is an oligonucleotide probe a portion of which is modified or labeled with a detectable marker.
4. The oligonucleotide according to claim 3, wherein said oligonucleotide is a synthetic
20 oligonucleotide in which a portion of its base(s) is(are) modified without impairing the function of said oligonucleotide as an oligonucleotide probe.
5. A detection method employing a RNA amplification process, which comprises the steps of:
25 forming a cDNA with a RNA-dependent DNA polymerase using a specific sequence of a RNA derived from *mecA* gene, a gene element of MRSA, present in a sample as a template, with a first primer having a sequence homologous to said specific sequence and a second primer having a sequence
30 complementary to said specific sequence, wherein either the first or second primer has a sequence having the RNA polymerase promoter sequence added at its 5'-region, thereby producing a RNA-DNA double-strand; digesting the RNA of said RNA-DNA double-strand with Ribonuclease H to
35 form a single-stranded DNA; and then forming a double-stranded DNA that includes a promoter sequence allowing transcription of said RNA sequence or a RNA comprising a

25 8. A detection method for a methicillin-resistant
Staphylococcus aureus (MRSA), which comprises the steps
of: conducting the RNA amplification process according to
claim 5 in the presence of an oligonucleotide probe
labeled with an intercalator fluorescent dye, wherein the
30 sequence of said probe is complementary to at least a
portion of said RNA transcription product, and
complementary binding of said probe to said RNA
transcription product results in a change of the
fluorescent property relative to that of a situation
35 where a complex formation is absent; and then measuring
the fluorescence intensity of the reaction solution.